

Appl. No. 09/595,256



PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Group
Art Unit: 3761

Attorney
Docket No.: 121027- 009

Applicant: Yoshinori KUMASAKA

Invention: DISPOSABLE DIAPER

Serial No: 09/595,256

Filed: June 15, 2000

Examiner: Karin Reichle

Certificate Under 37 CFR 1.8(a)

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner of Patents, Washington, D.C. 20231

on August 19, 2005

Michael S. Gzybowski

BRIEF ON APPEAL

Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Further to Appellant's Notice of Appeal filed May 19, 2005 in connection with the above-identified application, Appellant submits the present Brief on Appeal.

REAL PARTY IN INTEREST

Appellant assigned this application to Uni-Charm Corporation in an assignment which was executed by the inventor on October 18, 2000, and recorded in the United States Patent and

Trademark Office on November 2, 2000 at Reel No. 011214 and Frame No. 0693.

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RELATED APPEALS AND INTERFERENCES

There are no related cases involved in any appeal procedures or Interferences.

STATUS OF CLAIMS

Claims 1- 6 and 8 are pending in this application. Claims 1-6 and 8 stand under Final Rejection, from which rejection of claims 1-6 and 8 this appeal is taken.

STATUS OF AMENDMENTS

An Amendment after Final was filed by appellant on April 15, 2005. In an Advisory Action mailed May 5, 2005 the examiner indicated that the Amendment after Final would be entered for purposes of the Appeal.

SUMMARY OF CLAIMED SUBJECT MATTER

The present invention is directed to a disposable diaper. As described in the second full paragraph on page 4 of appellant's original specification, the disposable diaper includes a topsheet 2,

and a backsheet 3, a front waist region 6, a rear waist region 7 and a crotch region 8 that is longitudinally located between the front and rear waist regions (See Fig. 2), a waist-hole 16 and a pair of leg-holes 17 (See Fig. 1).

As described in the sentence bridging pages 4 and 5 of appellant's original specification, the front and rear waist regions 6, 7 respectfully comprise front and rear covering zones 21 and 22.

As shown in Fig. 2 the covering zones 21, 22 include a longitudinal ends at which longitudinal ends of each of the topsheet 2 and backsheet 3 are superimposed together continuously between the transversely opposite side edges of the diaper without any intervening structure between the topsheet 2 and backsheet 3, the covering zones 21, 22 further including a terminal longitudinal edge which coincides with terminal longitudinal edges of each of the topsheet 2 and backsheet 3.

As discussed in the paragraph bridging pages 5 and 6 of appellant's original specification, the front and rear waist regions 6, 7 are provided with elastic zones 18A, 18B which, as shown in Figs. 1 and 2, extend continuously along a full length in the circumferential direction of the front and rear waist regions 6, 7 so as to define at least part of the waist-hole 16.

As shown in Fig. 2, the elastic zones 18A, 18B have widths defined in a longitudinal direction and are attached to the covering zones 21, 22 so that a major portion of the width of the elastic zone extends beyond the terminal longitudinal edge of the covering zones. As further shown in Fig. 2 the elastic zones are nonmonolithically formed with the covering zones.

As described in the paragraph bridging pages 5-7 of appellant's original specification and illustrated in Fig. 2, the elastic zones 18A, 18B include a first member 31 that is elastically

stretchable in the circumferential direction of at least one of the front and rear waist regions to a length "L" that is greater than a transverse length of the covering zone 21, 22. The first member 31 extend between and to the transversely opposite side edges of the diaper. A second member 32 covers the first member 31. The second member 32 also extends between and to the transversely opposite side edges of the diaper.

As further described in the paragraph bridging pages 5-7 of appellant's original specification and illustrated in Fig. 2 the second member 32 is inelastically stretchable to a length greater than the transverse length of the covering zone and attached to the terminal longitudinal edge of the covering zone so as to form gathers 33 that extend along the entire length of the at least one of the front and rear waist regions in the circumferential direction between and to each of the opposite side edges of the diaper.

As described on page 6, line 4 of appellant's original specification and illustrated in Fig. 2, the first member 31 comprises at least one rubber ribbon.

As described in the portion of appellant's original specification that bridges pages 6 and 7 of appellant's original specification, the second member comprises a sheet material that can have an initial length greater than the length of the covering zone or, alternatively equal to the length of the covering zone.

As described in the first full paragraph on page 8 of appellant's original specification, the covering zones 21, 22 can be non-stretchable in the circumferential direction.

As discussed in the paragraph bridging pages 5-7 of appellant's original specification, the covering zones are elastically stretchable in the circumferential direction and have a stretch stress higher than a stretch stress of the elastic zone when the elastic zone is stretched by 3-20% in a portion of the covering zones extending along the elastic zone and having a same width as the elastic zone.

As described in the second full paragraph on page 8 of appellant's original specification, the leg-holes can comprise covering zones integral with the crotch region and continuous elastic zones extending along a full length in a circumferential direction of each of the leg-holes. The elastic zones include third members that are elastically stretchable in the circumferential direction of each of the leg-holes and fourth members securing and covering the third members. The fourth members are inelastically stretchable to a length greater than the length in the circumferential direction of each of the leg-holes and joined to an outer side edge of each of the leg-holes as shown in Figs 1 and 2.

ISSUES

Whether claims 1 - 6 are properly rejected under 35 U.S.C. §102(b) as being anticipated by Kato et al.

Whether claim 8 is properly rejected under 35 U.S.C. §103(a) as being unpatentable over Kato et al. in view of Kimberly-Clark and Daniels.

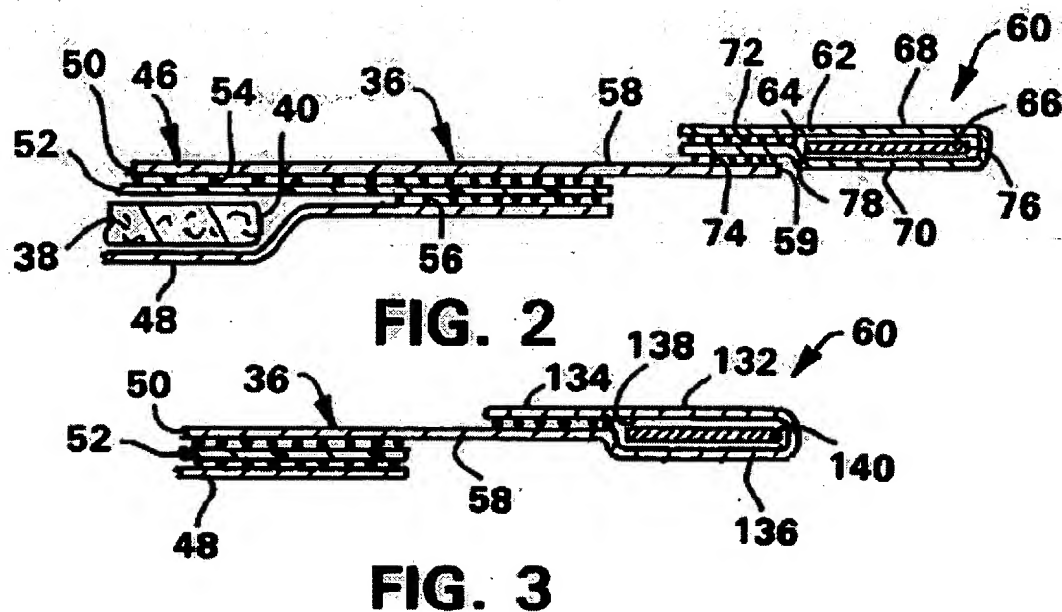
ARGUMENT

Appellant respectfully urges that claims 1-6 patentably distinguish from the Kato et al. as the claimed subject matter is not anticipated by Kato et al. as required under 35 U.S.C. §102(b).

The examiner has relied upon Kato et al. as follows:

...the front waist region is 24, the rear waist region if 26, the crotch region is 28, the waist opening is 30, the leg openings are 32, the top sheet is 48 of one or more layers and the backsheet is 46 of one of more layers, e.g. 50, 52, the covering zone is at least a portion of 24 and 26 except for the elastic zone, the longitudinal end of the covering zone is 36, as best understood....and includes a terminal longitudinal edge which coincides with terminal longitudinal edges of each of the topsheet and backsheet.

In each of the embodiments shown in Figs. 1 and 2 of Kato et al., there is no structure that corresponds to appellant's topsheet and backsheet in which a covering zone includes a terminal longitudinal edge which coincides with terminal longitudinal edges of each of the topsheet and backsheet, as required by appellant's independent claim 1.



Note only a single extension 58 of outer layer 50 extends between the waist border 36 and the waist elastic system 60 in each embodiment shown in Figs. 2 and 3.

Recognizing that Kato et al. flails to teach a topsheet, backsheet and covering zone that terminate at coincidental terminal longitudinal edges, the examiner has attempted to relied upon Kato et al. in the paragraph bridging columns 32-33 and at column 33, lines 17-32, column 4, lines 55-60 and column 4, line 61 et seq. as teaching that the terminal edges of the topsheet and backsheet may coincide.

However, the examiner's reliance is based upon an improper interpretation of Kato et al.

The portions of Kato et al. that the examiner has relied upon are presented as follows:

Paragraph bridging columns 32-33:

Referring now to FIG. 6, a base layer 98 having opposite edge portions 102, 104 is continuously moved in a machine direction 100. Base layer 98 may be a single layer of material, or a laminate or composite comprising, for example in this description,

two layers that ultimately form outer layer 50 and inner layer 52 (FIG. 2). Base layer 98 may also be made of a material suitable for use as liner 48. A pair of adhesive applicators, such as adhesive spray nozzles 106, apply adhesives, such as adhesives 74 (FIG. 2), along opposite edge portions 102, 104.

Column 33, lines 17-32:

A top layer 108 is continuously supplied on top of absorbent structures 38 and base layer 98. Just as base layer 98 may be made of a material or layers of material suitable for outer cover layer 46 or liner 48, top layer 108 may also be made of materials suitable for use as outer cover layer 46 or liner 48. In this particular description, top layer 108 is the liner. First elastic composite 97 and second elastic composite 112 are continuously delivered to base layer 98 so as to be positioned on respective edge portions 102, 104, and are joined thereto by adhesive beads 74 (FIG. 2). A pressure roller 110 presses elastic composites 97, 112, base layer 98, and, if desired, top layer 108, together to assist in joining the layers together. Top layer 108 may be smaller in transverse width than base layer 98, and thus may not be in contact with elastic composites 97, 112. The elastic composites 97, 112 will form elongate sleeve member 62 (FIG. 2).

Column 4, lines 55-60:

Waist border 36 (FIG. 2) may also be a multi-layer structure comprising outer cover layer 46 and liner 48. Waist border 36 desirably includes an extension of one of the layers of chassis 22, for example, an extension of outer layer 50 (FIG. 2). This extension forms a peripheral edge portion 58 that peripherally surrounds waist opening 30.

Column 4, line 61 et seq.:

Although described above with reference to a specific design and materials, training pant 20 can have other designs or constructions. Examples of other representative training pants are disclosed in U.S. Pat. No. 4,940,464, the contents of which are incorporated by reference herein, and U.S. Pat. No. 4,641,381, the contents of which are incorporated by reference herein.

The examiner has specifically relied upon Kato et al. as teaching that the top layer 108 “may be smaller” in transverse width than base layer 98.

The examiner has also relied upon Kato et al. at column 4, lines 55-60 as teaching that the waist border 36 “desirably” includes an extension of one of the layers of chassis 22, for example, an extension of outer layer 50 (FIG. 2).

The examiner states that the statement that the top layer 108 “may be smaller” in transverse width than base layer 98 “infers [it] may not be smaller.”

The examiner states that the statement that the waist border 36 “desirably” includes an extension of one of the layers of chassis 22, for example, an extension of outer layer 50 (FIG. 2) “does not require extension of one of the layers.”

It seems that a prior art reference should only be relied upon for what it actually teaches and not for what it fails to exclude. Otherwise, paragraphs such as:

While this invention has been described as having preferred embodiments, it will be understood that it is capable of further modifications. This application is therefore intended to cover any variations, equivalents, uses or adaptations of the invention following the general principles thereof, and including such departures from the present disclosure as come within known or customary practice in the art to which this invention pertains and falls within the limits of the appended claims

found before the claims in Kato et al. could reasonably be interpreted as a “teaching” of all possible “further modifications” and “any variations, equivalents, uses or adaptations.”

This is certainly not the case as much as it is not the case that references to “desirably,” “preferably,” etc. present open-ended prior art teachings.

The concept of relying upon a reference as a whole and interpreting the teachings of a reference in context of the reference has been set forth in the CCPA's holding in *In re Wesslau* where the court of appeals clearly stated:

It is impermissible within the framework of Section 103 to pick and choose from any one reference only so much of it as will support a given position to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. *In re Wesslau*, 147 USPQ 391, at 393 (CCPA 1965).

In the present situation the isolated portions of Kato et al. which the examiner has relied upon can more easily be interpreted (and more properly) as being consistent with the overall teachings of Kato et al., than be interpreted as allowing for structures and/or functions that Kato et al. does not teach or exclude.

Quite simply Kato et al teaches two embodiments of the waist portion of the pants which are shown in Figs. 2 and 3.

In Fig. 2 the elastic zone 60 is attached to a portion of the outer layer 50 (the examiner's "backsheet") which extends beyond the liner 48 (the examiner's "topsheet").

In Fig. 3 the elastic zone 60 is not nonmonolithically formed from the outer layer 50, but is rather formed from an extension of outer layer 50.

Clearly, neither of the embodiments shown in Figs. 2 or 3 is similar to appellant's claimed invention.

Kato et al. teaches two methods or processes for manufacturing the training pants.

Figure 4 depicts a method of process for manufacturing training pants that have the elastic zone structure depicted in Fig. 3, i.e. in which the elastic zone 60 is formed by folding a portion of outer layer 50 (base layer 142 in Fig. 4) that extends beyond liner 48 (top layer 150 in Fig. 4). Note at column 34, lines 39-40 Kato et al. expressly states: "With reference to FIG. 4, a description will be made of one method for making the modification in FIG. 3."

Figure 6 depicts a method or process for manufacturing training pants that have the elastic zone structure depicted in Fig. 2, i.e. in which the elastic zone 60 is attached to a portion of the outer layer 50 (base layer 98 in Fig. 6) that extends beyond the edges of liner 48 (top layer 108 in Fig. 6). Note the repeated reference to the method of process of Fig. 6 being used to form the embodiment shown in Fig. 2.

Note specifically that at column 2, lines 56-59 Kato et al. state that:

FIG. 4 is a schematic diagram illustrating one method for making an embodiment similar to that in FIG. 3;

FIGS. 5 and 6 schematically illustrate one method for making an embodiment similar to that in FIG. 2

Once it is recognized that Kato et al. teaches only the two embodiments shown in Figs. 2 and 3 and only teaches two methods or processes for making the embodiments, it becomes clear that the portions of Kato et al., which the examiner relies upon only refer to the two embodiments.

For example at column 33, lines 29-32 Kato et al. states:

Top layer 108 may be smaller in transverse width than base layer 98, and thus may not be in contact with elastic composites 97, 112. The elastic composites 97, 112 will form elongate sleeve member 62 (FIG. 2).

The reference “may be smaller” has to be considered in the context of “may be smaller...and thus...[may not be in contact with elastic composites 97,112].”

It is important to recognize that Kato et al. expressly teaches that:

The present invention provides an improved waist elastic system for children's training pants that results in a substantially uniform low tension along the peripheral border of the waist opening over a wide size range, a more comfortable fit, and improved ease of use by the child over an extended period of use. This is accomplished by, among other things, reducing the number of layers of material, i.e., the mass or amount of material, that the waist elastic system must gather. The more material there is to gather, the more the elasticity will be degraded or reduced in gathering the excess material. The present invention reduces this number of layers or amount of material to be gathered by incorporating an elastic member in, for example, one layer of material, thereby reducing loss of elasticity. (Column 4, lines 2-15)

and:

Desirably, waist elastic system 60 is joined to only one of the layers comprising chassis 22, such as outer layer 50. (Column 5, lines 19-21)

Clearly the express teachings of Kato et al. conform to the two embodiments shown in Figs. 2 and 3 and the method or process of manufacturing these two embodiments as shown in Figs. 4-6.

If anything, Kato et al. expressly teaches away from the attaching the elastic zone 60 to a portion of the diaper body where the inner layer 52, outer layer 50 and liner 48 would overlap or extend co-extensively.

As specifically recognized by Kato et al. such a modification would require the elastic zone 60 to be joined to two or more layers with the adverse affect of increasing the “number of layers or

amount of material to be gathered by incorporating an elastic member in, for example, one layer of material, thereby reducing loss of elasticity.” (Kato et al., column 4, lines 12-15).

Since Kato et al. does not specifically teach such a modification (and in fact teaches against it), at best the examiner could only urge that such a modification was obvious. Kato et al. clearly does not anticipate appellant’s claimed invention.

Moreover, under the Board or Appeals’ holding in *Ex parte Hartmann* that:

References cannot properly be combined if effect would destroy invention on which one of reference patents is based. *Ex parte Hartmann*, 186 USPQ 366 (PTO Bd App 1974)

appellants submit that such a modification to Kato et al. would destroy the goal of Kato et al. to reduce “the number of layers of material, i.e., the mass or amount of material, that the waist elastic system must gather” and “thereby reduce[e] loss of elasticity.”

From the above, it can be readily concluded that Kato et al. does not teach the limitation in appellant’s independent claim 1 that requires the “covering zone further including a terminal longitudinal edge which coincides with terminal longitudinal edges of each of said topsheet and backsheet.”

Moreover, it is submitted that Kato et al. actually teaches away from a structure having a covering zone that includes a terminal longitudinal edge which coincides with terminal longitudinal edges of each of a topsheet and backsheet.

Therefore, Kato et al. flails to anticipate appellant’s claimed invention.

The examiner has relied upon each of Kimberly-Clark and Daniels et al. as teaching elastic systems for leg openings.

The examiner's further reliance upon each of Kimberly-Clark and Daniels et al. does not address or overcome the differences between the present invention and Kato et al. as discussed above.

CONCLUSION

For the reasons advanced above, Appellant respectfully contends that the rejection of claims 1-6 as being anticipated by Kato et al under 35 U.S.C. §102(b) is improper because the examiner has not met the burden of establishing that Kato et al teaches all the elements of appellant's claimed invention.

Further for the reasons advanced above, Appellant respectfully contends that the rejection of claim 8 as being unpatentable over Kato et al. in view of Kimberly-Clark and Daniels under 35 U.S.C. §103(a) is improper because the examiner has not met the burden of establishing a prima facie case of obviousness of appellant's claimed invention.

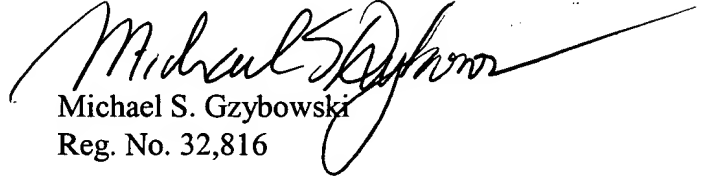
Reversal of the rejections on appeal is respectfully requested.

To the extent necessary, a petition for an extension of time under 37 CFR §1.136 is hereby made. Please charge the fees due in connection with the filing of this paper, including extension of

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time fees, to Deposit Account No. 12-2136 and please credit any excess fees to such deposit account.

Respectfully submitted,



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CLAIMS APPENDIX

Claim 1. A disposable diaper comprising:

a topsheet;

a backsheet;

a front waist region extending between and to transversely opposite side edges of the disposable diaper;

a rear waist region extending between and to the transversely opposite side edges of the diaper;

a crotch region located longitudinally between the front waist region and the rear waist region;

a waist-hole; and

a pair of leg-holes, said diaper further comprising:

at least one of said front and rear waist regions including a covering zone formed integrally with said crotch region, said covering zone including a longitudinal end at which longitudinal ends of each of said topsheet and backsheet are superimposed together continuously between the transversely opposite side edges of the diaper without any intervening structure between the topsheet and backsheet, said covering zone further including a terminal longitudinal edge which coincides with terminal longitudinal edges of each of said topsheet and backsheet, said at least one of said front and rear waist regions further including an elastic zone extending continuously along a full length in a circumferentially direction of said at least one of said front and rear waist regions to define at least

part of said waist-hole, said elastic zone having a width defined in a longitudinal direction and attached to said covering zone so that a major portion of the width of said elastic zone extends beyond the terminal longitudinal edge of said covering zone, said elastic zone being nonmonolithically formed with the covering zone,

said elastic zone including a first member that is elastically stretchable in said circumferential direction of said at least one of said front and rear waist regions to a length greater than a transverse length of said covering zone, said first member extending between and to the transversely opposite side edges of the diaper, and a second member covering said first member, said second member also extending between and to the transversely opposite side edges of the diaper; and

said second member being inelastically stretchable to a length greater than the transverse length of said covering zone and attached to the terminal longitudinal edge of said covering zone so as to form gathers that extend along the entire length of said at least one of said front and rear waist regions in the circumferential direction between and to each of the opposite side edges of the diaper.

Claim 2. The diaper according to Claim 1, wherein said first member comprises at least one rubber ribbon.

Claim 3. The diaper according to Claim 1, wherein said second member comprises a sheet material having an initial length greater than the length of said covering zone in said circumferential direction of said at least one of said front and rear waist regions and formed in said circumferential

direction with gathers in order to shorten said sheet material substantially to said length of said covering zone.

Claim 4. The diaper according to Claim 1, wherein said second member comprises a sheet material having a length substantially equal to the length of said covering zone in said circumferential direction of said at least one of said front and rear waist regions and inelastically stretchable in said circumferential direction.

Claim 5. The diaper according to Claim 1, wherein said covering zone is non-stretchable in said circumferential direction of said at least one of said front and rear waist regions.

Claim 6. The diaper according to Claim 1, wherein said covering zone is elastically stretchable in said circumferential direction and has a stretch stress higher than an stretch stress of said elastic zone when said elastic zone is stretched by 3-20% in a portion of said covering zone extending along said elastic zone and having a same width as said elastic zone.

Claim 8. The diaper according to Claim 1, wherein each of said leg-holes comprises a covering zone integral with said crotch region and a continuous elastic zone extending along a full length in a circumferential direction of each of said leg-holes, said elastic zone including a third member that is elastically stretchable in said circumferential direction of each of said leg-holes and a fourth member

securing and covering said third member, said fourth member being inelastically stretchable to a length greater than said length in said circumferential direction of each of said leg-holes and joined to an outer side edge of each of said leg-holes.